

Tao Huang

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EDUCATION

Shanghai Jiao Tong University & Shanghai AI Laboratory Ph.D. in in Computer Science and Engineering advised by Dahua Lin and Jiangmiao Pang	Sep. 2024 – Present
The Chinese University of Hong Kong M.Phil. in Computer Science and Engineering	Aug. 2022 – July 2024
ShanghaiTech University B.E. in Computer Science and Technology, GPA: 3.75 (5/253)	Sep. 2018 – July 2022

PUBLICATIONS

- **Tao Huang**, Junli Ren, Huayi Wang, Zirui Wang, Qingwei Ben, Muning Wen, Xiao Chen, Jianan Li, and Jiangmiao Pang (2025). Learning Humanoid Standing-up Control across Diverse Postures Preprint ([ArXiv 2025](#))
- Junli Ren, **Tao Huang**, Huayi Wang, Zirui Wang, Qingwei Ben, Jiangmiao Pang, and Ping Luo (2025). VB-Com: Learning Vision-Blind Composite Humanoid Locomotion Against Deficient Perception Preprint ([ArXiv 2025](#))
- Huayi Wang, Zirui Wang, Junli Ren, Qingwei Ben, **Tao Huang**, Weinan Zhang, and Jiangmiao Pang (2025). BeamDojo: Learning Agile Humanoid Locomotion on Sparse Footholds Preprint ([ArXiv 2025](#))
- Junfeng Long*, Junli Ren*, Moji Shi*, Zirui Wang, Tao Huang, Ping Luo, and Pang Jiangmiao (2025). Learning Humanoid Locomotion with Perceptive Internal Model IEEE International Conference on Robotics and Automation ([ICRA 2025](#))
- Guangqi Jiang*, Yifei Sun*, **Tao Huang***, Huanyu Li, Yongyuan Liang, Huazhe Xu (2025). Robots Pre-Train Robots: Manipulation-Centric Robotic Representation from Large-Scale Robot Datasets. International Conference on Learning Representations ([ICLR 2025](#))
- **Tao Huang***, Guangqi Jiang*, Yanjie Ze, Huazhe Xu (2024). Diffusion Reward: Learning Rewards via Conditional Video Diffusion. European Conference on Computer Vision ([ECCV 2024](#))
- Jianan Li, **Tao Huang**, Qinxu Zhu, Tien-Tsin Wong (2024). Physics-based Scene Layout Generation from Human Motion. ACM SIGGRAPH ([SIGGRAPH 2024](#))
- Hanqing Wang, Jiahe Chen, Wensi Huang, Qingwei Ben, Tai Wang, Boyu Mi, **Tao Huang**, Siheng Zhao, Yilun Chen, Sizhe Yang, Peizhou Cao, Wenye Yu, Zichao Ye, Jialun Li, Junfeng Long, ZiRui Wang, Huiling Wang, Ying Zhao, Zhongying Tu, Yu Qiao, Dahua Lin, and Jiangmiao Pang (2024). GRUtopia: Dream General Robots in a City at Scale. Preprint ([arXiv 2024](#))
- **Tao Huang**, Kai Chen, Wang Wei, Jianan Li, Yonghao Long, Qi Dou (2023). Value-Informed Skill Chaining for Policy Learning of Long-Horizon Tasks with Surgical Robot. IEEE/RSJ International Conference on Intelligent Robots and Systems ([IROS 2023](#))
- **Tao Huang**, Kai Chen, Bin Li, Yun-Hui Liu, Qi Dou (2023). Demonstration-Guided Reinforcement Learning with Efficient Exploration for Task Automation of Surgical Robot. IEEE International Conference on Robotics and Automation ([ICRA 2023](#))
- Yonghao Long, Wang Wei, **Tao Huang**, Yuehao Wang, Qi Dou (2023). Human-in-the-loop Embodied Intelligence with Interactive Simulation Environment for Surgical Robot Learning. IEEE Robotics and Automation Letters ([RA-L 2023](#))
- **Tao Huang***, Jiachen Wang*, Xiao Chen (2022). Accelerating Representation Learning with View-Consistent Dynamics in Data-Efficient Reinforcement Learning. ([Preprint 2022](#))
- Yinxu Tang, **Tao Huang**, Xi Huang, Ziyu Shao, and Yang Yang (2022). Learning-Aided Stable Matching for Switch Controller Association in SDN Systems. IEEE International Conference on Communications ([ICC 2022](#))

WORKING EXPERIENCES

Shanghai AI Laboratory , Research Intern, advised by Jiangmiao Pang	Sep. 2023 – Present
Shanghai Qi Zhi Institute , Research Intern, advised by Huazhe Xu	Aug. 2023 – Feb. 2024
Tencent Robotics X , Summer Research Intern, advised by He Zhang	June. 2023 – Aug. 2023

HONORS AND AWARDS

Graduate Scholarship, CUHK	Aug. 2022
Outstanding Graduates Award, Shanghai	July. 2022
Outstanding Graduates Award, ShanghaiTech University	July. 2022
Second Prize in Chinese Undergraduate Mathematical Contest in Modeling, China	Dec. 2020
First Class Scholarship (Top 2%) of ShanghaiTech University	Nov. 2019, 2020, 2021
Outstanding Student (Top 5%) of ShanghaiTech University	Nov. 2019, 2020, 2021

SKILLS

Language: TOFEL 109: reading 30, listening 28, speaking 23, writing 28; CET6 609

Programming: Python, MatLab, PyTorch

Data Analysis: Seaborn, Matplotlib, Pandas, Numpy

Developer Tools: Linux, LaTeX, Github